EFED File Copy

MRID No. 444577-79

DATA EVALUATION RECORD
ALGAE OR DIATOM TIER I TEST
GUIDELINE 122-2

1. **CHEMICAL:** Prohexadione calcium — PC Code No.: 112600

2. **TEST MATERIAL:** BAS 125 W — Purity: 90.6%

3. **CITATION:**

Authors:	S.G. Thompson, J.P. Swigert, D.W. Haughey, and J. Qiu
Title:	BAS 125 W: A 5-Day Toxicity Test with the Freshwater Diatom (*Navicula pelliculosa*)
Study Completion Date:	January 23, 1997
Laboratory:	Wildlife International Ltd., Easton, MD
Sponsor:	BASF Corporation, Research Triangle Park, NC
Laboratory Report ID:	147A-143
DP Barcode:	D245631
MRID No.:	444577-79

4. **REVIEWED BY:** Mark A. Mossler, M.S., Toxicologist, Golder Associates Inc.
Signature: **Date:**

APPROVED BY: Pim Kosalwat, Ph.D., Senior Scientist, Golder Associates Inc.
Signature: **Date:**

5. **APPROVED BY:** Brian Montague, Fisheries Biologist
Signature: Brian Montague **Date:** 7/13/99

6. **STUDY PARAMETERS:**
Definitive Test Duration: 120 hours
Type of Concentrations: Mean measured

7. **CONCLUSIONS:** This study is scientifically sound and fulfills the guideline requirements for an algal toxicity test. Exposure for 120 hours to a mean measured BAS 125 W concentration of 1.2 mg ai/L (representative of the aquatic concentration equivalent to the maximum labeled use rate of 1.67 lb ai/A) did not affect the growth or reproduction of *N. pelliculosa*.

8. **ADEQUACY OF THE STUDY:**
A. **Classification:** Core
B. **Rationale:** N/A
C. **Repairability:** N/A

DATA EVALUATION RECORD
ALGAE OR DIATOM TIER I TEST
GUIDELINE 122-2

1. **CHEMICAL:** Prohexadione calcium PC Code No.: 112600

2. **TEST MATERIAL:** BAS 125 W Purity: 90.6%

3. **CITATION:**

Authors:	S.G. Thompson, J.P. Swigert, D.W. Haughey, and J. Qiu
Title:	BAS 125 W: A 5-Day Toxicity Test with the Freshwater Diatom (*Navicula pelliculosa*)
Study Completion Date:	January 23, 1997
Laboratory:	Wildlife International Ltd., Easton, MD
Sponsor:	BASF Corporation, Research Triangle Park, NC
Laboratory Report ID:	147A-143
DP Barcode:	D245631
MRID No.:	444577-79

4. **REVIEWED BY:** Mark A. Mossler, M.S., Toxicologist, Golder Associates Inc.

Signature: [signature] **Date:** 7/1/98

APPROVED BY: Pim Kosalwat, Ph.D., Senior Scientist, Golder Associates Inc.

Signature: P. Kosalwat **Date:** 7/1/98

5. **APPROVED BY:**

Signature: [signature] **Date:** 11/13/98

6. **STUDY PARAMETERS:**

Definitive Test Duration: 120 hours
Type of Concentrations: Mean measured

7. **CONCLUSIONS:** This study is scientifically sound and fulfills the guideline requirements for an algal toxicity test. Exposure for 120 hours to a mean measured BAS 125 W concentration of 1.2 mg ai/L (representative of the aquatic concentration equivalent to the maximum labeled use rate of 1.67 lb ai/A) did not affect the growth or reproduction of *N. pelliculosa*.

8. **ADEQUACY OF THE STUDY:**

   A. Classification: Core

   B. Rationale: N/A

   C. Repairability: N/A

9. **GUIDELINE DEVIATIONS:** No deviations of consequence were noted.

10. **SUBMISSION PURPOSE:**

11. **MATERIALS AND METHODS:**

   A. Test Organisms

Guideline Criteria	Reported Information
Species *Skeletonema costatum* *Anabaena flos-aquae* *Selenastrum capricornutum* *Navicula pelliculosa*	*Navicula pelliculosa*
Initial Number of Cells 3,000 - 10,000 cells/mL	3,000 cells/mL
Nutrients Standard formula, e.g. 20XAAP	Freshwater algal medium with silica and selenium

   B. Test System

Guideline Criteria	Reported Information
Solvent	None
Temperature Skeletonema: 20°C Others: 24-25°C	24.8-25.6°C
Light Intensity Anabaena: 2.0 KLux (±15%) Others: 4.0-5.0 KLux (±15%)	3.7 - 4.5 KLux

Guideline Criteria	Reported Information
Photoperiod Skeletonema: 14 h light, 10 h dark or 16 h light, 8 h dark Others: Continuous	Continuous
pH Skeletonema: approx. 8.0 Others: approx. 7.5	Initial 7.5 Final 8.5

C. **Test Design**

Guideline Criteria	Reported Information
Dose range 2X or 3X progression	N/A
Doses at least 5	1.2 mg active ingredient (ai)/L
Controls negative and/or solvent	Negative control
Replicates per dose 3 or more	3
Duration of test 120 hours	120 hours
Daily observations were made?	Yes
Method of Observations	Cellular counts
Maximum Labeled Rate	1.67 lb ai/A

12. **REPORTED RESULTS:**

Guideline Criteria	Reported Information
Initial and 120 h cell densities were measured?	Yes
Control cell count at 120 hr ≥2X initial count?	Yes
Initial chemical concentrations measured? (Optional)	Samples collected at study initiation and termination were analyzed by HPLC

Guideline Criteria	Reported Information
Raw data included?	Yes

Dose Response

Mean Measured Concentration (mg ai/L)	Avg. Cell Density (x 10^4 cells/mL)	% Inhibition*	120-Hour pH
Control	197	-	8.5
1.2	207	-5	8.5

*Negative value indicates stimulation.

Other Significant Results: None reported.

Statistical Method: No statistical analyses were performed. It was simply stated that BAS 125 W at a concentration of 1.2 mg ai/L inhibited the growth of *N. pelliculosa* by -5%.

13. **VERIFICATION OF STATISTICAL RESULTS:** It is apparent from the cell density values that the 5-day growth and reproduction of *N. pelliculosa* was not affected by BAS 125 W at a mean measured concentration of 1.2 mg ai/L.

14. **REVIEWER'S COMMENTS:** This study is scientifically sound and fulfills the guideline requirements for an algal toxicity test. Exposure for 120 hours to a mean measured BAS 125 W concentration of 1.2 mg ai/L did not affect the growth or reproduction of *N. pelliculosa*. This study can be categorized as **Core**.